

```
Welcome to STN International! Enter x:  
x  
Welcome to STN International! Enter x:  
LOGINID:SSSPSTA1208DXJ
```

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

***** Welcome to STN International *****

NEWS 1 Apr 08 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Apr 09 "Ask CAS" for self-help around the clock
NEWS 3 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4 Apr 09 ZDB will be removed from STN
NEWS 5 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IPIUDB
NEWS 6 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7 Apr 22 BIOSIS Gene Names now available in TOXCENTER
NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available
NEWS 9 Jun 03 New e-mail delivery for search results now available
NEWS 10 Jun 10 MEDLINE Reload
NEWS 11 Jun 10 PCTFULL has been reloaded
NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment
NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;
 saved answer sets no longer valid
NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY
NEWS 15 Jul 30 NETFIRST to be removed from STN
NEWS 16 Aug 08 CANCERLIT reload
NEWS 17 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18 Aug 08 NTIS has been reloaded and enhanced
NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
 now available on STN
NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced
NEWS 23 Sep 03 JAPIO has been reloaded and enhanced
NEWS 24 Sep 16 Experimental properties added to the REGISTRY file
NEWS 25 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 26 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 27 Oct 21 EVENTLINE has been reloaded
NEWS 28 Oct 24 BEILSTEIN adds new search fields
NEWS 29 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 30 Oct 25 MEDLINE SDI run of October 8, 2002
NEWS 31 Nov 18 DKILIT has been renamed APOLLIT
NEWS 32 Nov 25 More calculated properties added to REGISTRY
NEWS 33 Dec 02 TIBKAT will be removed from STN
NEWS 34 Dec 04 CSA files on STN
NEWS 35 Dec 17 PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 36 Dec 17 TOXCENTER enhanced with additional content
NEWS 37 Dec 17 Adis Clinical Trials Insight now available on STN
NEWS 38 Dec 30 ISMCE no longer available
NEWS 39 Jan 21 NUTRACEUT offering one free connect hour in February 2003
NEWS 40 Jan 21 PHARMAML offering one free connect hour in February 2003
NEWS 41 Jan 29 Simultaneous left and right truncation added to COMPENDEX,
 ENERGY, INSPEC
NEWS 42 Feb 13 CANCERLIT is no longer being updated
NEWS 43 Feb 24 METADEX enhancements
NEWS 44 Feb 24 PCTGEN now available on STN
NEWS 45 Feb 24 TEMA now available on STN

NEWS 46	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS 47	Feb 26	PCTFULL now contains images
NEWS 48	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 49	Mar 19	APOLL10 offering free connect time in April 2003
NEWS 50	Mar 20	EVENTLINE will be removed from STN
NEWS 51	Mar 24	PATDPAFULL now available on STN
NEWS 52	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS 53	Mar 24	Indexing from 1957 to 1966 added to records in CA/CAPLUS
NEWS EXPRESS January 6 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002		
NEWS HOURS	STN Operating Hours Plus Help Desk Availability	
NEWS INTER	General Internet Information	
NEWS LOGIN	Welcome Banner and News Items	
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN	
NEWS WWW	CAS World Wide Web Site (general information)	

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 11:03:00 ON 25 MAR 2003

```
=> fil reg  
'REG' IS NOT A VALID FILE NAME  
SESSION CONTINUES IN FILE 'HOME'  
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files  
that are available. If you have requested multiple files, you can  
specify a corrected file name or you can enter "IGNORE" to continue  
accessing the remaining file names entered.
```

=> fil reg
COST IN U.S. DOLLARS
SINCE FILE
ENTRY
SESSION
TOTAL
0.31 0.31

FILE 'REGISTRY' ENTERED AT 11:03:15 ON 25 MAR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e vitamin?

E1	1	VITAMEDIN/BI
E2	1437	VITAMIN/BI
E3	0	--> VITAMIN7/BI
E4	3	VITAMINS/BI
E5	1	VITAMISIN/BI
E6	2	VITAMIURAM/BI
E7	1	VITAMOGEN/BI
E8	2	VITAMYCIN/BI
E9	6	VITAN/BI
E10	1	VITANEURIN/BI
E11	1	VITANEURON/BI
E12	1	VITANEVRIL/BI

=> e vitaminb12

E1	1	VITAMEDIN/BI
E2	1437	VITAMIN/BI
E3	0	--> VITAMINB12/BI
E4	3	VITAMINS/BI
E5	1	VITAMISIN/BI
E6	2	VITAMIURAM/BI
E7	1	VITAMOGEN/BI
E8	2	VITAMYCIN/BI
E9	6	VITAN/BI
E10	1	VITANEURIN/BI
E11	1	VITANEURON/BI
E12	1	VITANEVRIL/BI

=> e b12

E1	1	B11ZN045O2/BI
E2	1	B11ZN045O21/BI
E3	9324	--> B12/BI
E4	3	B12,H12/BI
E5	1	B12,.053/BI
E6	1	B12.1/BI
E7	1	B12.15/BI
E8	3	B12.2/BI
E9	1	B12.3/BI
E10	1	B12.4/BI
E11	1	B12.5/BI
E12	1	B12.6/BI

=> e cobalamin

E1	1	COBALAFLUOR/BI
E2	17	COBALAMIDE/BI
E3	516	--> COBALAMIN/BI
E4	26	COBALAMINE/BI
E5	1	COBALAMINELACTAM/BI
E6	1	COBALAMINMONO/BI
E7	1	COBALAMINMONOCARBOXYL/BI
E8	1	COBALAMINMONOCARBOXYLIC/BI
E9	2	COBALAMINSULFONIC/BI
E10	1	COBALAMINTRI/BI
E11	1	COBALAMINTRICARBOXYL/BI
E12	1	COBALAMINTRICARBOXYLIC/BI

=> s e3 or e4

516 COBALAMIN/BI
26 COBALAMINE/BI
L1 531 COBALAMIN/BI OR COBALAMINE/BI

=> e cobalamin/cn

E1 1 COBAL ALLOY, NONBASE, FE 55-58,NI 34.0-35.0,CO 5.00-6.00, TI
2.30-2.80,SI 0-0.50,CU 0.20-0.40,MN 0-0.40,C 0-0.05 (35NKT) /
CN
E2 1 COBALAFLUOR Y/CN
E3 1 --> COBALAMIN/CN
E4 1 COBALAMIN (5'-PHOSPHATE) SYNTHASE (AGROBACTERIUM TUMEFACIENS
STRAIN C58 GENE COBS) /CN
E5 1 COBALAMIN (5'-PHOSPHATE) SYNTHASE (BRUCELLA MELITENSIS STRAIN
16M GENE BMEI1100) /CN
E6 1 COBALAMIN (5'-PHOSPHATE) SYNTHASE (COBS) (PYROBACULUM AEROPH
ILUM STRAIN IM2 GENE PAE0379) /CN
E7 1 COBALAMIN (5'-PHOSPHATE) SYNTHASE (COBS-1) (ARCHAEOGLOBUS FU
LGIDUS GENE AF0037) /CN
E8 1 COBALAMIN (5'-PHOSPHATE) SYNTHASE (COBS-2) (ARCHAEOGLOBUS FU
LGIDUS GENE AF2323) /CN
E9 1 COBALAMIN (5'-PHOSPHATE) SYNTHASE (FUSOBACTERIUM NUCLEATUM N
UCLEATUM STRAIN ATCC25586 GENE FN0912) /CN
E10 1 COBALAMIN (5'-PHOSPHATE) SYNTHASE (MESORHIZOBIUM LOTI STRAIN
MAF303099 GENE MLR1388) /CN
E11 1 COBALAMIN (5'-PHOSPHATE) SYNTHASE (METHANOSARCINA MAZEI STRA
IN GOE1 GENE MM2057) /CN
E12 1 COBALAMIN (5'-PHOSPHATE) SYNTHASE (MYCOBACTERIUM TUBERCULOSI
S STRAIN CDC1551 GENE MT2264) /CN

=> s e3

L2 1 COBALAMIN/CN

=> d

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

SMI 13444-79-5 BIOC10270
CH Cobalaminide, dihydrogen phosphate (ester), inner salt, 3'-ester with
Cobalaminide, dihydrogen phosphate (ester), inner salt, 3'-ester with
ion(1-) (WCl) (CA THREX NAME)

OTHER CA INDEX NAMES:

CH Cobalaminide, imid(1-), dihydrogen phosphate (ester), inner salt,
3'-ester with 5,6-dimethyl-1- α -D-ribofuranosyl-1H-benzimidazole
CH Cobalaminide, imid(1-), dihydrogen phosphate (ester), inner salt,
3'-ester with 5,6-dimethyl-1- α -D-ribofuranosylbenzimidazole (ACI)

CH Cobalaminide, imid(1-), dihydrogen phosphate (ester), inner salt, 3'-ester
with 5,6-dimethyl-1- α -D-ribofuranosyl-1H-benzimidazole

OTHER NAMES:

CH Cobalamine

CH Cobalamin

MF C62 H88 Co N13 O14 P

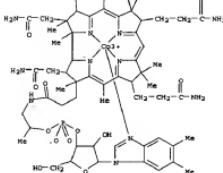
IC C21H36CoN13O14P

ICN File# : ADISHEM, AGRICOLA, ANAMST, BIORUNNERS, BIOSIS, BIOTRONIK,
CA, CASPLUS, CASREAC, CHEMCATS, CHEMLIST, CII, CSChem, DBPI, DIOPGENES,
EMBASE, EMBASE/2000, EMBASE/2005, EMBASE/2006, EMBASE/2007,
Other Sources: EINSEC**

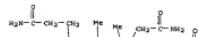
(*See ChemList File for up-to-date regulatory information)

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS (Continued)

PAGE 3-A



924 REFERENCES IN FILE CA (1947 TO DATE)
152 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
926 REFERENCES IN FILE CASPLUS (1947 TO DATE)



<C

09/690,353

Page 6

=> fil .search

COST IN U.S. DOLLARS
FULL ESTIMATED COSTSINCE FILE
ENTRY
17.14TOTAL
SESSION
17.35

FILE 'MEDLINE' ENTERED AT 11:07:10 ON 25 MAR 2003

FILE 'CAPLUS' ENTERED AT 11:07:10 ON 25 MAR 2003
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COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)FILE 'USPATFULL' ENTERED AT 11:07:10 ON 25 MAR 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)FILE 'EMBASE' ENTERED AT 11:07:10 ON 25 MAR 2003
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=> d his

(FILE 'HOME' ENTERED AT 11:03:00 ON 25 MAR 2003)

FILE 'REGISTRY' ENTERED AT 11:03:15 ON 25 MAR 2003

E VITAMIN?
E VITAMINB12
E B12
E COBALAMINL1 531 S E3 OR E4
L2 1 S E3
E COBALAMIN/CNFILE 'MEDLINE, CAPLUS, BIOSIS, USPATFULL, EMBASE' ENTERED AT 11:07:10 ON
25 MAR 2003=> s l1 or l2
L3 58106 L1 OR L2=> s l3 and (chelat? or ligand?)
L4 1906 L3 AND (CHELAT? OR LIGAND?)=> s l4 and (radionuclide?)
L5 25 L4 AND (RADIONUCLIDE?)=> dup rem 15
PROCESSING COMPLETED FOR L5
L6 23 DUP REM L5 (2 DUPLICATES REMOVED)=> fil reg
COST IN U.S. DOLLARS
FULL ESTIMATED COSTSINCE FILE
ENTRY
51.79TOTAL
SESSION
69.14FILE 'REGISTRY' ENTERED AT 11:08:21 ON 25 MAR 2003
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STRUCTURE FILE UPDATES: 24 MAR 2003 HIGHEST RN 500530-01-8

DICTIONARY FILE UPDATES: 24 MAR 2003 HIGHEST RN 500530-01-8

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

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Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> fil .search	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	0.40	69.54

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FILE 'CAPLUS' ENTERED AT 11:08:38 ON 25 MAR 2003
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=> d 16 ibib ab hitstr 1-
YOU HAVE REQUESTED DATA FROM 23 ANSWERS - CONTINUE? Y/(N):y

L4 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 20031332321 CAPLUS

DOCUMENT NUMBER: 138193234

TITLE: One-pot synthesis of macrocyclic metal complexes with biopolymers and the use thereof for producing

agents for use in SPECT diagnosis, radiodiagnostics and radiotherapy

INVENTOR(S): Dierckx, Georges; Schmitt-Willich, Herbert; Moehl, Guenther; Frenzel, Thomas; Suelke, Detlev; Beuer, Heiko; Radtke, Bernd; Weismann, Hanns-Joachim; Eder, Peter; Seitz, Michael

DETECT ASSIGNEE(S): Schering AG, Germany

SEARCH: PCT; WO; DE; FR; GB; ES; PT; NL; AT; CH; DE; FR; GB; IE; IT; LU; MC; NL; RU; SE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; TR; BR; CO; CI; CM; GA; GH; GW; ML; MR; RW; TD; TM; TZ; ZM; ZW

DOCUMENT TYPE: PCT/EP; PCT/DE; PCT/FR; PCT/GB; PCT/IE; PCT/LU; PCT/MC; PCT/NL; PCT/PT; PCT/SE; PCT/TR; PCT/BR; PCT/CO; CI; CM; GA; GH; GW; ML; MR; RW; TD; TM; TZ; ZM; ZW

LANGUAGE: German

FAMILY SIZE: 1

PATENT INFORMATION:

PATENT NO.: WO 2003032321

KIND DATE: PCT/EP 2001-01-13 20030323

APPLICATION NO.: PCT/EP 2001-01-13 20030323

INVENTION NUMBER: 138193234

PRIORITY DATE: DE 2001-01-13 20030323

DE 2001-01-13 20030323

GB 2001-01-13 20030323

FR 2001-01-13 20030323

IE 2001-01-13 20030323

LU 2001-01-13 20030323

MC 2001-01-13 20030323

NL 2001-01-13 20030323

PT 2001-01-13 20030323

SE 2001-01-13 20030323

TR 2001-01-13 20030323

BR 2001-01-13 20030323

CO 2001-01-13 20030323

CI 2001-01-13 20030323

CM 2001-01-13 20030323

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GW 2001-01-13 20030323

ML 2001-01-13 20030323

MR 2001-01-13 20030323

RW 2001-01-13 20030323

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TZ 2001-01-13 20030323

ZM 2001-01-13 20030323

ZW 2001-01-13 20030323

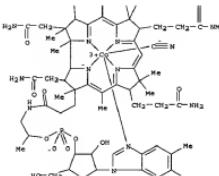
L4 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2003 ACS (Continued)

L4 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A



PAGE 2-A



L4 ANSWER 2 OF 23 USPATFPI
ACCESSION NUMBER: 2003133231 USPATFPI
TITLE: Endothelial cell expression patterns

INVENTOR(S): St. Croix, Mark; Cockeysville, MD; UNITED STATES
Tucker, Sean; Bethesda, MD; UNITED STATES
Kinsler, Kenneth W.; Belair, MD; UNITED STATES

NUMBER KIND DATE
PATENT INFORMATION: US 6269001757 AI 20030323
APPLICATION INFO.: US 2003-918715 AI 20030801 (9)

NUMBER DATE
PRIORITY INFORMATION: US 6269001757 20000803 (60)
US 2003-2245169 20000811 (60)
US 2003-2245170 20010411 (60)

DOCUMENT TYPE: Utility
FILE ELEMENT: 1
LEGAL REPRESENTATIVE: BANNER & WITCOFF, 1000 I STREET NW, SUITE 1100, WASHINGTON, DC, 20001

NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing (page(s))

LINE COUNT: 4716
CROSS-REFERENCE TO THIS PATENT:

AB To gain a better understanding of tumor angiogenesis, new techniques for isolating endothelial cells (ECs) and evaluating gene expression

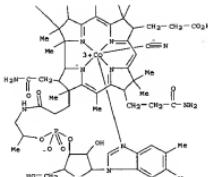
patterns were developed. When transcripts from ECs derived from normal and tumor tissue were compared, it was found that, in contrast to non-endothelial cells, over 170 genes predominantly expressed in the endothelial cells of normal tissue were also expressed in the tumor-derived endothelium revealed 79 differentially expressed genes, including 40 that were specifically elevated in the tumor-derived endothelial cells. The 79 genes were found to be active genes from this group demonstrated that more were similarly expressed in the endothelium of primary tumors and metastatic lesions, but not in the corresponding metastatic lesions of the liver. These results demonstrate that angiogenesis in normal and tumor tissue are distinct at the molecular level, and have significant implications for the development of anti-angiogenic therapies in the future.

IT 9023-90-9 USPATFPI
(Inhibitor endothelin receptor protein and genes and antibodies for cancer diagnosis and therapy and for antitumor screening)

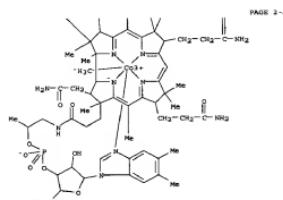
IN 9023-90-9 USPATFPI
CH Mutants, methionylamino 1 consenape (SCT) (CA INDEX NAME)

STRUCTURE DIAGRAM IS NOT AVAILABLE

PAGE 2-A

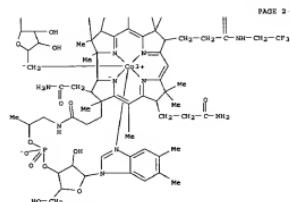
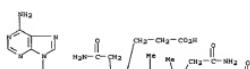


CM 376334-84-2 CAPLUS
Cobinamide, Co-methyl-, dihydrogen phosphate (methyl), cobinyl salt, 3'-ester with (5,6-dimethyl-1-alpha-D-ribofuranosyl-1H-benzimidazol-3-yl) (SC1) (CA INDEX NAME)

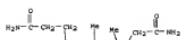
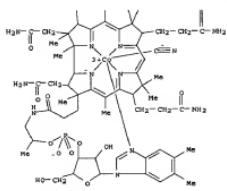
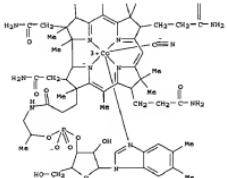


CM 442137-79-5 CAPLUS
Cobinyl acid-5'-acetyl-hexamide, Co-(5'-deoxyadenosin-5'-yl)-3d-(2,2,2-trifluoroethyl)-, 4-(dihydrogen phosphate), inner salt, 1-ester with (5,6-dimethyl-1-alpha-D-ribofuranosyl-1H-benzimidazol-3-yl) (SC1) (CA INDEX NAME)

PAGE 1-A



IT 44-18-9, Cyanocobalamin 44-18-9D, Cyanocobalamin, DTPA conjugates 12774-24-2, Transcobalamin
RE (Transcobalamin study, undecapeptide) B12s (biological study) (transcobalamin B12s) conjugates useful for treatment and diagnosis of abnormal cellular proliferation)
EN 44-18-9, Cyanocobalamin 44-18-9D, Cyanocobalamin, DTPA conjugates 12774-24-2, Transcobalamin
RE (Transcobalamin study, undecapeptide) B12s (biological study) (transcobalamin B12s) conjugates useful for treatment and diagnosis of abnormal cellular proliferation)
CN Vitamin B12 (SC1, SC1) (CA INDEX NAME)



RN 12774-24-2 CAPLUS

CN Transcobalamin (CA INDEX NAME)

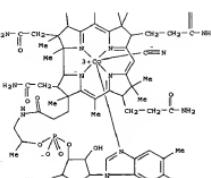
*** SUBSTANE B12A1 IS NOT AVAILABLE ***

IT 18-18-9P, Cyanocobalamin, reaction products with poly-L-lysine, DTPA conjugate

DTIC (Biological study, unclassified); BBR (Synthetic preparation); BIOC (Biological study); PREP (Preparation); (trans)cobalamin binding conjugate useful for treatment and diagnosis

RN 68-18-9 CAPLUS

C6 Vitamin B12 (HCl, HCl) (CA INDEX NAME)



IT 18218-77-8P, Cyanocobalamin-b-carboxylic acid, reaction products with poly-L-lysine, DTPA conjugate

DTIC (Biological study, unclassified); BBR (Synthetic preparation); PREP (Preparation); (trans)cobalamin binding conjugate useful for treatment and diagnosis

L6 ANSWER 3 OF 23 CASPLUS COPYRIGHT 2003 ACS (Continued)

RN 35215-77-8 CASPLUS

CM Cobinic acid-3'-adenylphosphate (Co- α -cyano- κ -Cl-, dihydrogen phosphate (5,6-dimethyl-1- α -D-ribofuranosyl-1H-benzoimidazole- κ (Cl)) (CA INDEX NAME)

PAGE 1-A

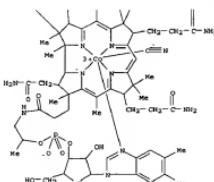


L6 ANSWER 3 OF 23 CASPLUS COPYRIGHT 2003 ACS (Continued)

RN 35215-77-8 CASPLUS

CM Cobinic acid-3'-adenylphosphate (Co- α -cyano- κ (Cl), dihydrogen phosphate (5,6-dimethyl-1- α -D-ribofuranosyl-1H-benzoimidazole- κ (Cl)) (CA INDEX NAME)

PAGE 2-A



L6 ANSWER 4 OF 23 USPATFULL

ACCESSION NUMBER: US2002-137125 USPATFULL

TITLE: Fluorescent cobalamins and uses thereof
INVENTOR(S): Griscom, Charles W., Salt Lake City, UT, UNITED STATES
Frederick, Robert S., Salt Lake City, UT, UNITED STATES
McCreary, James, Salt Lake City, UT, UNITED STATES
Bartow, Michael J., Salt Lake City, UT, UNITED STATES
Cannon, Michelle J., Salt Lake City, UT, UNITED STATES

NUMBER KIND DATE

PRIORITY INFORMATION: US 1999-161368P 19990206 (60)
APPLICATION INFO: US 2002-97644 A1 20020115 (10)
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2000-US29370.
FILED on 26 Oct 2000, UNKNOWN

NUMBER DATE

PRIORITY INFORMATION: US 1999-161368P 19990206 (60)

DOCUMENT TYPE: US 2002-97644P 20010316 (60)

DOCUMENT STATUS:

FILED/RECEIVED: 20001026 10:00 AM (EST)
RECEIVED: 20010316 10:00 AM (EST)
SEARCHED: 20010316 10:00 AM (EST)
INDEXED: 20010316 10:00 AM (EST)

NUMBER OF CLAIMS: 17 Drawing Page(s)

NUMBER OF DRAWINGS: 17

CROSS REFERENCE(S): 13,277

CA INDEXING IS AVAILABLE FOR THIS PRIORITY

AS THIS PRIORITY IS AVAILABLE, RELATION TO FLUORESCENT COBALAMINS AND USES OF THESE COMPOUNDS. More particularly, this invention relates to FLUORESCENT COBALAMINS AND USES THEREOF. The invention relates to FLUORESCENT OR LIGHT-PRODUCING COMPOUND COVALENTLY LINKED TO COBALAMIN. THESE FLUORESCENT COBALAMINS CAN BE USED TO AS DIAGNOSTIC AND

PROGNOSTIC AGENTS. The invention also relates to (a) to distinguish cancer cells and tissues from healthy cells, (b) to distinguish normal cells from cancer cells, (c) to distinguish cancer cells, and (d) to determine if an individual will respond positively to chemotherapy using cobalamin-therapeutic bi conjugates.

17 13451-34-4: Fluorescent cobalamins and uses for tumor tissue staining
17 13451-34-4: Fluorescent cobalamins and uses for tumor tissue staining
CM Trinucleocobalamin II (SCl) (CA INDEX NAME)

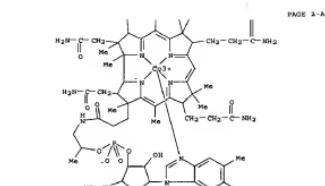
STRUCTURE DIAGRAM IS NOT AVAILABLE

17 13451-34-4: Fluorescent cobalamins and uses for tumor tissue staining
17 13451-34-4: Fluorescent cobalamins and uses for tumor tissue staining
RN 68-15-9 USPATFULLCM Cobinic acid-3'-adenylphosphate (ester), inner salt, 3'-ester with (5,6-dimethyl-1- α -D-ribofuranosyl-1H-benzoimidazole- κ (Cl)).
ion(+) (PbCl) (CA INDEX NAME)

L6 ANSWER 4 OF 23 USPATFULL (Continued)

RN 68-15-9 USPATFULL (Continued)

PAGE 1-A

IT 68-15-9: Cyano cobalamin
(group of fluorescent cobalamins and uses for tumor tissue staining)
RN 68-15-9 USPATFULL
CM Vitamin B12 (ECI; PCl) (CA INDEX NAME)

L6 ANSWER 4 OF 23 USPATFULL (Continued)

L6 ANSWER 4 OF 23 USPATFULL (Continued)

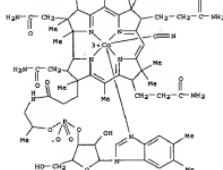
17 38384-38-8P 38318-55-1P, CDC 226 38318-77-8P,

CH₃ 195
Igmon, of fluorescent cobaloxime and uses for tumor tissue staining
CH 38264-28-8 USPATFULL
CH Cobinac acid-adenosineamide, Co-(cyano- κ appa Cl-, dihydrogen phosphate
(ester), inner salt, 3'-ester with (S,6-dimethyl-1,-alpha-D-
ribofuranosyl-1H-benzimidazole- κ appa H3) (CA INDEX NAME)

PAGE 1-A



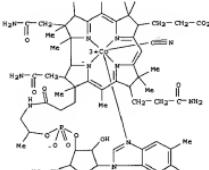
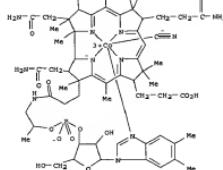
PAGE 2-A



L6 ANSWER 4 OF 23 USPATFULL (Continued)

L6 ANSWER 4 OF 23 USPATFULL (Continued)

PAGE 2-A

HN 38318-55-2 USPATFULL
Cobinac acid-adenosineamide, Co-(cyano- κ appa Cl-, dihydrogen phosphate
(ester), inner salt, 3'-ester with (S,6-dimethyl-1,-alpha-D-
ribofuranosyl-1H-benzimidazole- κ appa H3) (HCl) (CA INDEX NAME)HN 38318-77-8 USPATFULL
Cobinac acid-adenosineamide, Co-(cyano- κ appa Cl-, dihydrogen phosphate
(ester), inner salt, 3'-ester with (S,6-dimethyl-1,-alpha-D-
ribofuranosyl-1H-benzimidazole- κ appa H3) (HCl) (CA INDEX NAME)

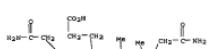
PAGE 1-A

PAGE 1-A



14 ANSWER 5 OF 23 USPATFULL (Continued)
ribofuranosyl-1H-benzimidazole- κ (Kappa-H2) (9CI) (CA INDEX NAME)

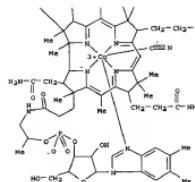
PAGE 1-A



14 ANSWER 5 OF 23 USPATFULL (Continued)

ribofuranosyl-1H-benzimidazole- κ (Kappa-H2) (9CI) (CA INDEX NAME)

PAGE 2-A



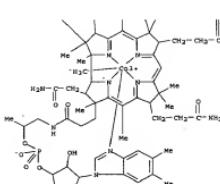
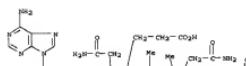
NN 37614-94-3 USPATFULL
Cobinic acid-adenyl-ribonamide, Co-methyl-, dihydrogen phosphate (ester),
inner salt, 3'-ester with (5,6-dimethyl-1-alpha-D-ribofuranosyl-1H-
benzimidazole- κ (Kappa-H2) (9CI) (CA INDEX NAME)

14 ANSWER 5 OF 23 USPATFULL (Continued)

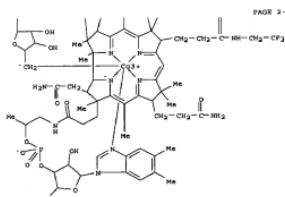
PAGE 1-A

14 ANSWER 5 OF 23 USPATFULL (Continued)
(5,6-dimethyl-1-alpha-D-ribofuranosyl-1H-benzimidazole- κ (Kappa-H2) (9CI) (CA INDEX NAME))

PAGE 1-A



NN 44127-79-2 USPATFULL
Cobinir acid-adenyl hexamide, Co-(5'-deoxyadenosin-5'-yl)-N-(2,2,2-
trifluoroethyl)-, 2-(dihydrogen phosphate), inner salt, 3'-ester with



PAGE 2-A

16 ANSWER 5 OF 23 USPATFULL (Continued)

17 68-19-9, Cyanocobalamin 68-19-9D, Cyanocobalamin, OTCB
synonyms 13374-34-2, Transcobalamin

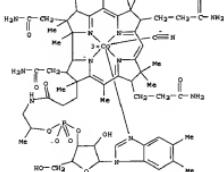
conjugates 12774-34-2, Transcobalamin (transcobalamin binding conjugates useful for treatment and diagnosis of abnormal cellular proliferation); 44-18-9, HCCPARTILL.

RN 68-19-9 USP/ATU/LL
CN Vitamin B12 (8CI, 9CI) (CA INDEX NAME)

CH VITAMIN B12 (600, 900) (CH 2000000 MCG)

56 ANSWER 5 OF 23 USPATFULL (Continued)

PAGE 2-2



RN 68-19-9 USP/ATU
CN Vitamin B12 (SCl, 9Cl) (CA INDEX NAME)

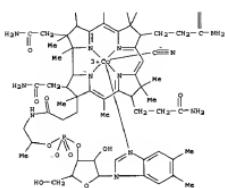
$$\text{H}_2\text{N}-\overset{\text{O}}{\text{C}}-\text{CH}_2-\text{CH}_2-\text{Me} \quad \text{Me} \quad \text{Me} \quad \text{CH}_2-\overset{\text{O}}{\text{C}}-\text{NH}_2$$

PAGE 1 -7

16 ANSWER 5 OF 23 USE PAGE 114 (Continued)

16 ANSWER 5 OF 23 USPATFULL (Continued)

SAGE 14



PN 12774-24-2 USPATFULL

CN Transcobalamin (9CI) (CA INDEX NAME)

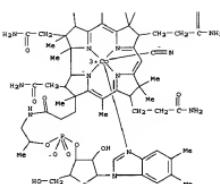
STRUCTURE DIAGRAM IS NOT AVAILABLE
IT 68-19-50P, Cyanocobalamin, reaction products with poly-L-lysine,
OTFA conjugate
(transcobalamin binding conjugates useful for treatment and diagnosis
of cyanocobalamin deficiency)

of abnormal cellular proliferation)
RN 68-19-9 USPATFULL
CN Vitamin B12 (SC1, 9CI) (CA INDEX NAME)

16 ANSWER 5 OF 23 USPATFULL (continued)

$$\text{H}_2\text{N}-\overset{\text{O}}{\parallel}\text{C}-\text{CH}_2-\text{CH}_2-\text{Me}-\text{Me}-\text{CH}_2-\overset{\text{O}}{\parallel}\text{C}-\text{NH}_2$$

PAGE 2-



IT 38818-77-80Y, Cyanocobalamin-b-carboxylic acid, reaction products with poly-L-lysine hydrobromide (transcobalamin binding conjugates useful for treatment and diagnosis of abnormal cellular proliferation)

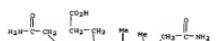
L6 ANSWER 7 OF 23 USPATFULL (Continued)

PAGE 1-A

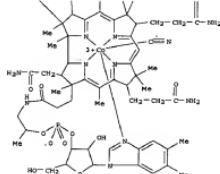
L6 ANSWER 7 OF 23 USPATFULL (Continued)

IN 376394-84-2 USPATFULL
CN Cobanic acid-α-deep-pentamide, Co-(cyano-κappa-C), dihydrogen phosphate (ester),
inner salt, linked at 2', 2'-water with (5,6-dimethyl-1-α-hydroxy-3-β-hydroxy-5-β-ribofuranosyl-3H-
benzimidazole-18-benzimidazole-κappa-N) (HCl) (CA INDEX NAME)

PAGE 1-A



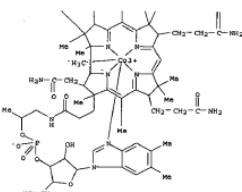
PAGE 2-A



L6 ANSWER 7 OF 23 USPATFULL (Continued)

L6 ANSWER 7 OF 23 USPATFULL (Continued)

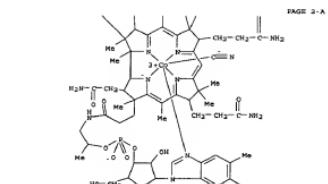
PAGE 1-A



PAGE 2-A

IT 38314-78-9 polyisoprene conjugate
(cobalamin complex useful as cardiovascular agents and as imaging
agents)

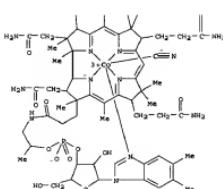
IN 18222-10-0 USPATFULL

CN Cobanic acid-α-deep-pentamide, Co-(cyano-κappa-C), dihydrogen phosphate
(ester), inner salt, linked at 2', 2'-water with (5,6-dimethyl-1-α-hydroxy-3-β-hydroxy-5-β-ribofuranosyl-3H-
benzimidazole-18-benzimidazole-κappa-N) (HCl) (CA INDEX NAME)IT 68-19-9 Cytosine-daloxolamine, cobalamin conjugate
(cobalamin complex useful as cardiovascular agents and as imaging
agents)

IN 68-19-9 USPATFULL

14 ANSWER 7 OF 23 USPATFULL (Continued)
CH Vitamin B12 (ECL. 9C1) (CA INDEX NAME)

14 ANSWER 7 OF 23 USPATFULL (Continued)



14 ANSWER 8 OF 23 USPATFULL
ACCESSION NUMBER: 140079737 USPATFULL
TITLE: Cobalamin compounds useful as antibiotic agents and as imaging agents
INVENTOR(S): Henrique P.C., Roseville, MN, UNITED STATES
Collina, Douglas A., Rochester, MN, UNITED STATES

NUMBER: kind DATE
PATENT INFORMATION: US 20004042994 A1 200004011
APPLICATION INFO.: US 2001-073144 A1 200101931 (9)

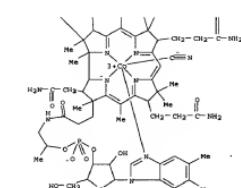
NUMBER: DATE
PRIORITY INFORMATION: US 2000-208148P 200000531 (60)
US 2000-208149P 200000531 (60)
DOCUMENT TYPE: Utility
FILE NUMBER: A91111
NAME OF REPRESENTATIVE: SPADING, 191 PEACHTREE STREET, N.E., ATLANTA, GA, 30303-1763
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
EXEMPLARY DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 4946

CAN INDEXING IS REQUESTED FOR THIS PATENT
AS A MEDICAL COMPOUND: 1
AS A PHARMACEUTICAL COMPOUND: 1
AS A DIAGNOSTIC AGENT: 1
AS A TREATMENT OR DIAGNOSIS OF A MICROBIAL INFECTION: 1

IT 38312-77-8 278294-0
(continued) Cobalamin, useful as antibiotic agents and as imaging agents
RN 38312-77-8 USPATFULL
CH Cobalamin, cobalamin, Co-(cyano-Kappa Cl-, dihydrogen phosphate tested), inner salt, 3'-ester with (5,6-dimethyl-1-alpha-D-ribofuranosyl-1-methylbenzimidazole-Kappa H3) (ECL) (CA INDEX NAME)

14 ANSWER 8 OF 23 USPATFULL (Continued)

PAGE 1-A



RN 376324-84-3 USPATFULL
Choline acid-wedged-pentamide, Co-methyl-, dihydrogen phosphate (ester), inner salt, 3'-ester with (5,6-dimethyl-1-alpha-D-ribofuranosyl-1-methylbenzimidazole-Kappa H3) (ECL) (CA INDEX NAME)

80

14. ANSWER 10 OF 23 CAPTION: COPYRIGHT 2003 ACS
ANSWER NUMBER: 2003-886142 CAPTION
ITEM NUMBER: 1234567890
TITLE: Cobaltin compounds useful as antibiotic agents and
imaging agents
INVENTOR(S): Mullane, Douglas A.; Hogenkamp, Henricus P. C.
PATENT/ASSIGNEE(S): Foundation for Medical Education and Research, University of Minnesota, University of Minnesota
SOURCE: PCT Int. Appl. 166 PP
CROSS REFERENCE: PCT Int. Appl. 166 PP
DOCUMENT TYPE: Patent
LANGUAGE: English
PCT/ACC. HN COUNT: 1
PATER INFORMATION:
PATENT INFORMATION:

PRIORITY APPLICANT INFO.:
NAME: **WILLIAM H. COOPER** SS: **20005931**
ADDRESS: **1100 11th Street, Suite 1000, Washington, DC 20004-3749**
OTHER SOURCE(S): **NANPAT 116-11106**
AB: The invention provides a covalent derivative, linked to an antibiotic and/or an imaging agent, as well as pharmaceutical compositions comprising the compound for use in the treatment or diagnosis of a microbial infection.
Infectious Disease: **73216-94-2**
MHL: RCT (Reagent), RACT (Reagent or Reagent)
Antibiotic: **38212-77-8 CAPDIL** (covalently linked antibiotic as imaging agent)
Chemical: **38212-77-8 CAPDIL** (covalently linked antibiotic Co-(cyanine kappa,C)-dihydroxy phenyl-5,6-dihydro-4H-1,3-dioxin-2-yl)-alpha-D-glucosamine (a glucose molecule linked to a cyanine dye via an amide linkage)
Other: **38212-77-8 CAPDIL** (covalently linked antibiotic Co-(cyanine kappa,C)-dihydroxy phenyl-5,6-dihydro-4H-1,3-dioxin-2-yl)-alpha-D-glucosamine (a glucose molecule linked to a cyanine dye via an amide linkage)

16 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2003 ACS (Continued)
RN 376394-84-2 CAPLUS
CN Cobanic acid-acid-pestaneide, Co-methyl-, dihydrogen phosphate (ester),
inner salt, 1'-ester with (5,6-dimethyl-1'-alphe-D-ribofuranosyl-1H-
benzimidazole-1- κ o-NH₂)_n (PC11) (CA INDEX NAME)

$$\text{H}_2\text{N}-\overset{\text{O}}{\text{C}}-\text{CH}_2 \quad \text{CH}_2-\overset{\text{CO}_2\text{H}}{\text{C}}-\text{N}_2 \quad \text{Me} \quad \text{Me} \quad \text{CH}_2-\overset{\text{O}}{\text{C}}-\text{NH}_2$$

L6 ANSWER 10 OF 33 CAPLUS COPYRIGHT 2003 ACR (Continued)

BACK 1-3

$$\begin{array}{ccccccc}
 & \text{O} & & \text{CO}_2\text{H} & & & \text{O} \\
 & \parallel & & | & & & \parallel \\
 \text{H}_2\text{N}-\text{C}-\text{CH}_2 & & & \text{CH}_2-\text{CH}_3 & & & \text{CH}_2-\text{C}-\text{NH}_2
 \end{array}$$

T-6 ANSWER 19 OF 21 CAPTION COPYRIGHT 2002 AGS (Continued)

Page 2

IT 28218-77-8D, reaction products with poly-L-Lysine
 NL RCT (Reagent); SMN (Synthetic preparation); PREP (Preparation); RACT
 (Measmt or reagent)
 (cobalamin compds. useful as antibiotic agents and as imaging agents)
 RN 32218-22-1 CAPIUS
 CO Cobinamide acid-capped-pentanamide, Co-(cyano- κ appa C)-, dihydrogen phosphate
 (ester) (ester), inom. salt, 5'-ester with
 (5,6-dihydro-1,1-dimethyl-1,2-dihydro-2-oxo-4H-1,3-dihydro-2H-1,2,4,5-tetrahydronaphthalene-1,3-dione) (inner name)
 NL 1,1-dimethyl-1,2-dihydro-2-oxo-4H-1,3-dihydro-2H-1,2,4,5-tetrahydronaphthalene-1,3-dione (inner name)

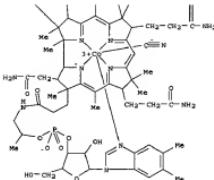
L6 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2003 ACS (Continued)

1.6 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2003 ACG (Continued)

PAGE 1-A



PAGE 2-3



64 ANSWER 11 OF 23 CAPTION COPYRIGHT 2003 ACS
1201:885157 CAPTION
ITEM NUMBER:
TITLE:
Cobalamin compounds useful as cardiovascular agents
INVENTOR(S):
Collins, Douglas A.; Hopkamp, Henricus P. C.
PATENT ASSIGNEE(S):
Mayo Foundation for Medical Education and Research,
UNIVERSITY OF THE UNIVERSITY OF Minnesota
PCT INT. APP. NO.: 03/115,494
SOURCE:
CROSS-REF.: P10000
DOCUMENT TYPE:
Patent
FAMILY ACC. NUM. COUNT:
English

1-6 ANSWER 11 OF 23 CARS4116 ©RIGHT 2003 ACS (Continued)

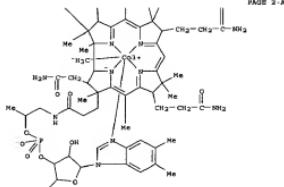
RN 376394-84-2 CAPLUS
CN Cobinic acid-adenylyl-ester, Co-methyl-, dihydrogen phosphate (ester)
inner salt, 3'-ester with (5,6-dimethyl-1-.alpha.-D-ribofuranosyl-1H-
benzimidazole-.kappa.N3) (9CI) (CA INDEX NAME)

L4 ANSWER 11 OF 23 CAPIUS COPYRIGHT 2003 ACS (Continued)



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L4 ANSWER 11 OF 23 CAPIUS COPYRIGHT 2003 ACS (Continued)



PAGE 2-A

IT 38218-77-8, poly(lysine) conjugates
 RS 38218-77-8, poly(lysine) (synthetic preparation); FRAZ (Preparation); RACT (Reactant or reagent)
 (colchicine compd., useful as cardiovascular agents and as imaging agent)

IN 38218-77-8, CAPIUS
 CAPIUS (colchicine pentadecyl, Co (cyano- κ -alpha,C)-, dihydrogen phosphate (ester), inner salt, 3'-ester with (5,6-dimethyl-1-alpha, 5-difluoromethyl-10-methoxydodecyl- κ appa,N) (ECI, 9CII) (CA INDEX NAME)

L4 ANSWER 11 OF 23 CAPIUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A

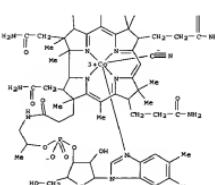
L4 ANSWER 11 OF 23 CAPIUS COPYRIGHT 2003 ACS (Continued)
 RS 18-12-9 CAPIUS (ECI, 9CII) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

IT 48-13-9, Cyanocobalamin, cobalamin conjugates
 RS 48-13-9, (therapeutic use); R101 (biological study); US66 (useful as cardiovascular agents and as imaging agent)



16 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2003 ACS (Continued)

9/690,353 Page 24

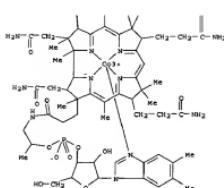
LA ANSWER 12 OF 23 CAPTION COPYRIGHT 2003 ACS
 2003100552 CAPTION
 DOCUMENT NUMBER: 154-22111
 TITLE: Colasmannone conjugates useful as tumor imaging and therapeutic agents
 INVENTOR(S): Colasmannone, F. C. Collins, Douglas A.
 PATENT ASSIGNEE(S): Mayo Foundation for Medical Education and Research,
 USA, Regents of the University of Minnesota
 SOURCE: PCT/US02/03536, 02/03/02, 16 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	NAME	APPLICATION NO.	DATE
MO 2003100552	AI 10/094426	WO 2003018069	200304092000015
MO 2003100552	AI 10/094426	US 2003018069	200304092000015
US 1319887	AI 10/099518	EP 2003092211	200304092000015
US 1319887	AI 10/099518	US 2003015972	200304092000015
PRIMACY APPROV. INFO.:		2003040915972	200304092000015
OTHER SOURCE(S):	MARSH 13-23118		
AS	The present invention provides novel colasmannone derivatives, which are useful for medical treatment and diagnosis. Colasmannone conjugates have a phosphate or amino acids linked to metal radionuclides (radioactive or nonradioactive) and are useful for medical treatment and diagnosis, and/or as diagnostic agents for medical use, and/or as therapeutic agents (therapeutic study); BTG1 (Biological study); USBB (use);		
IT	13448-78-10; Colasmannone, derivative, conjugates		
US	13448-78-10; Colasmannone conjugates useful as imaging and therapeutic agents		
CH	Colasmannone, dihydroxy phosphate (macro), inner salt, 1'-ester with 1,1'-bis(4-aminophenyl)-1,1'-binaphthyl-2-ylmethylidene-bis(2-hydroxy-1-aminocyclohexane) (KCl) (CA INDEX NUMBER)		

36 ANSWERS 13 OF 31 CARMAS COPYRIGHT 2003 ACS (continued)

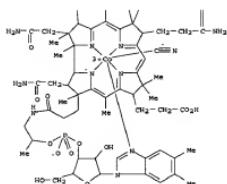
LG ANSWER 12 OF 22 CAPLUS COPYRIGHT 2003 ACS (Continued)
 RN 36264-28-2 CAPLUS
 CN (E)-1,3-dicarboxylic acid,bcdg pentasemide, Co-(cyano-.kappa C)-, dihydrogen phosphate
 ester, (inner salt), 5'-ester with
 (5,6-dimethyl-1-alpha-D-ribofuranosyl-
 3-H-phenylsulfonyl)kappa.NH (ACN) /PCP TRADE NAME)

EMX-1a3



17 26264-28-8 38318-55-2 38318-77-8
82556-15-8
RL: RCT (Reactant); RACT (Reactant or reagent)
Each row contains a unique combination of RCT and RACT.

L6 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2003 ACS (Continued)



RU 38318-77-3 CAPLUS
 CN Cobinic acid-Abcerg-pentamide, Co (cyano- -kappa.Cl-), dihydrogen phosphate (ester), inner salt, 3'-ester with (5,6-dimethyl-1-phenyl-2-oxobutanyl)- 3H-benzimidazole- -kappa N3) (VCII) (CA INDEX NAME)

L6 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2003 ACS (Continued)



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L6 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2003 ACS (Continued)

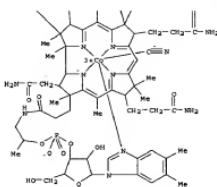
RU 38318-77-3 CAPLUS
 CN Cobinic acid-Abcerg-pentamide, Co (cyano- -kappa.Cl-), dihydrogen phosphate (ester), inner salt, 3'-ester with (5,6-dimethyl-1-phenyl-2-oxobutanyl)- 3H-benzimidazole- -kappa N3) (VCII) (CA INDEX NAME)

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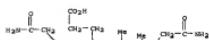
L6 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2003 ACS (Continued)

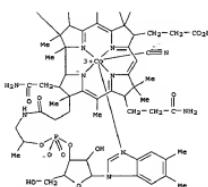
PAGE 3-A



RU 38318-77-3 CAPLUS
 CN Cobinic acid-Abcerg-pentamide, Co (cyano- -kappa.Cl-), dihydrogen phosphate (ester), inner salt, 3'-ester with (5,6-dimethyl-1-phenyl-2-oxobutanyl)- 3H-benzimidazole- -kappa N3) (VCII) (CA INDEX NAME)

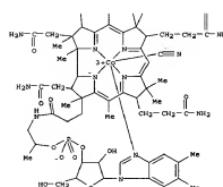
PAGE 1-A





IT 68-19-900 Cyanoocobalamin, poly-lysine conjugated
RU 68-19-900 (Poly-lysine poly-cyanocobalamin) (Preparation
(cobalamin conjugates useful as imaging and therapeutic agents))
RM 68-19-9 CAPLUS
CN Vitamin B12 (8Cl, 9Cl) (CA INDEX NAME)

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L6 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2003 ACS (Continued)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L6 ANSWER 13 OF 23 USPATENTL
ACCESSION NUMBER: 2003010413 USPATENTL
TITLE: Method and a system for enhanced in vivo clearance of
diagnostic and/or therapeutic agents by extracorporeal
removal of the target molecules and agents for said purpose
INVENTOR(S): Nilsen, Rune, Lund, Sweden
Hornqvist, Magnus, Lund, Sweden
Hornqvist, Kristina, Åkers korp, Sweden
Sandberg, Bengt, Lund, Sweden
Sandberg, Eva, Lund, Sweden
Strand, Sven-Erik, Lund, Sweden
Strand, Sven-Erik Technology AB, Lund, Sweden (non-U.S.
corporation)

NUMBER	KIND	DATE
US 6255138	AI	20010526
WO 9212730		19920806
WO 9212731		19920807 (8)
WO 9212732		19920815
WO 9310113		19930513 PCT 171 date
		19930513 PCT 101(e) date

PATENT INFORMATION: NUMBER DATE
PRIORITY INFORMATION: 20 19910142 19910117
DOCUMENT TYPE: Utility
FILE NUMBER: 20010526
GRANTED
FILE DATE: 19920806
PRACTICE: 19920807
PRACTICE: 19920815
PRACTICE: 19930513
PRACTICE: 19930513

LEGAL REPRESENTATIVE: SWANSON & BRATSCHEK, L
MATERIAL: 1
EXEMPLARY CLAIM: 1
SPECIFIC DRAWINGS: 1 Drawing Figure(s); 2 Drawing Page(s)

LINE COUNT: 456
CAN INDEXING IS AVAILABLE FOR THIS PATENT
ABSTRACT: A method and a system for reducing non-target levels of
specific molecules intended for diagnostic and/or therapeutic
application in a subject. The method includes:
•Administering to a vertebrate host and kept therein for a certain time

in
order to be concentrate to the target by being attached thereto. The
molecules which are not attached to the target are removed from the
blood stream of the host and have reduced to a lower concentration
by
passing the blood through an extracorporeal device.

IT 68-19-9, Vitamin B12 33008-78-3, Cobalamin
RE 68-19-9, USPATENTL
CN Vitamin B12 (8Cl, 9Cl) (CA INDEX NAME)

16 ANSWER 13 OF 23 USPATFULL (Continued)

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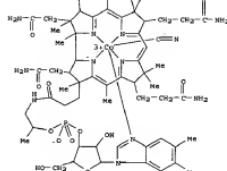
16 ANSWER 13 OF 23 USPATFULL (Continued)

13408-78-1 USPATFULL
CH Cobanamide, dihydrogen phosphate (ester), inner salt, 3'-ester with
(5,6-dihydro-1H,4H-dihydro-4-oxo-3H-1,3-dihydroisocoumarin-3H-benzimidazole-.kappa.-H3),
ion(1-) (9CI) (CA INDEX NAME)

PAGE 1-A

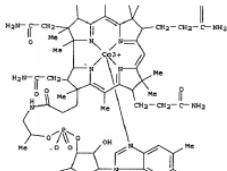


PAGE 2-A



16 ANSWER 13 OF 23 USPATFULL (Continued)

PAGE 2-A



16 ANSWER 14 OF 23 USPATFULL
ACCESSION NUMBER: 13408-87976 USPATFULL
TITLE: Radiolabeling of vitamin B sub-12 and
B12-13408-87976
INVENTOR(S): Collins, Douglas A., Rochester, MN, United States
Mogensen, Henrika Petrea, Roseville, MN, United States
PATENT ASSIGNEE(S): Regents of the University of Minnesota, Minneapolis,
Minnesota, United States
Mayo Foundation for Medical Education and Research,
Rochester, MN, United States (U.S. corporation)

PATENT INFORMATION:
APPLICATION INFO.: US 6008845
US 60088453
RELATED APPLN. INFO.: Division of Ser. No. US 1994-59227, filed on 13 Apr
1994 which is a division of Ser. No. US 1995-587955,
filed on 13 Nov 1995, now patented. Pat. No. US

5739513
DOCUMENT TYPE: Utility
FILE NUMBER: 20000801
PRIORITY NUMBER: US 60088453
ASSISTANT EXAMINER: Jones, Deborah
LASTEST RECEIVED: 08/20/2001
NUMBER OF CLAIMS: 1
EXEMPLAR CLAIM: 1
NUMBER OF FIGURES: 2
LINE COUNT: 669

ONE DRAWING IS AVAILABLE FOR THIS PATENT.
ABSTRACT: A compound useful for *in vivo* imaging of organs and tumors is provided

of the invention. #272191 Cobanamide, #272192 is derived from #272191 Cobanamide and a cobalamin, #272193 is derived from #272191 Cobanamide and a cobalamin, #272194 is a linking group and X is a chelating group, optionally

covalently bonded to a radionuclide or a paramagnetic metal
ion, and n is 1-3.

IT is also useful for *in vivo* imaging of organs and tumors
#272190, Cobanide, conjugates with linker and (radio)labeled
chelate

imbalanced (radio)labeled deriv. prep. for medical imaging

EP 12408-78-1 USPATFULL

CH Cobanamide, dihydrogen phosphate (ester), inner salt, 3'-ester with

(5,6-dihydro-1H,4H-dihydro-4-oxo-3H-1,3-dihydroisocoumarin-3H-benzimidazole-.kappa.-H3),
ion(1-) (9CI) (CA INDEX NAME)

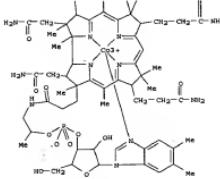
16 ANSWER IS OF 23 CAPLUS COPYRIGHT 2003 ACS (Continued)

US 1999-354563 A1 19990715
OTHER SOURCE(S): WABAT 137-4721
AS Cobalamin (Co)Cl₃(C₆H₅COO)₃ Y-Dot: [Co(III) - cobalamin; ClO₄ - residue of monocarboxylic acid of cobalamin; X = CN, NH₂, Me, adenoyl; Y = linking group; Dot = detectable chelating group comprising radioisotopes or paramagnetic metal ion are provided. The compounds of the invention are useful in evaluation of kidney, liver, spleen, or intestinal function and for detecting tumors.
IT 13408-78-1D, Cobalamin, conjugates with linker and (radio)labeled

L6 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2002 ACS (Continued)
 RL: THU (therapeutic use); BIOL (biological study); USES (Uses);
 (cobalamin (radioisotope) deriv. prep. for medical imaging)
 RIN 1345-01-21 CAPLUS
 CH Cobalamin, cobalt(II) diphosphonate (ester), inner salt, 3'-ester with
 (S,6-dimethyl-1, alpha-D-ribofuranomyl-1H-benzimidazole kappa, N1),
 ion(+) 19Cl (CA INDEX NAME)

BMC 3-8

1.6 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2003 ACS (Continue)

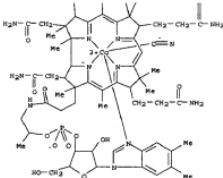


IT 12774-22-2, Transcobalamin
RL BSM (Biological study, unclassified); BSMG (Biological study)
(cobalamin deriv. binding to intrinsic factor and transcobalamin)
RN 12774-24-2 CAPLUS
CN Transcobalamin (3C1) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

$$\text{H}_2\text{N}-\overset{\text{O}}{\text{C}}-\text{CH}_2-\text{CH}_2-\text{CH}_3 \quad \text{Me} \quad \text{Me} \quad \text{CH}_2-\overset{\text{O}}{\text{C}}-\text{NH}_2 \quad \text{O}$$



PAGE 2-A



16 ANHANG 22.07.23 SAWWE COPYRIGHT 2023 AGS

ANSWER IS ON
ACCESSION NUMBER:

DOCUMENT NUMBER: 88-34141
TITLE: Detection of genetic variation with radioactive
isotopes. I. Electrophoretic separation of

AUTHOR(S): *Aligemeier, L.; Electrophoretic screening of plasma proteins with a selected panel of compounds*
Cavalli-Sforza, Luigi L.; Daiger, Stephen P.; Rumsby, Diane P.

CORPORATE SOURCE: *Dep. Genet., Stanford Univ. Med. Cent., Stanford, CA, USA*

SOURCE: USA
American Journal of Human Genetics (1977), 29(6),
581-92

DOCUMENT TYPE: CODEN: AJINGAS; ISSN: 0002-9297
LANGUAGE: English

AB To detect new genetic variation in human plasma proteins, a panel of 63 radioactive substances were screened as potential radioligands using polyacrylamide gel electrophoresis and autoradiography. Vitamins, hormones, drugs, amino acids, purines, pyrimidines, sugars, and lipids labeled with ^{14}C or other radionuclides were among those substances tested.

A majority bound to albumin and a smaller fraction to prealbumin and lipoproteins. Several vitamins and hormones bound to specific α -, β -, and γ -globulins. Electrophoretic polymorphisms of the vitamin D binding protein (tracycortin) and thyroxine-binding globulin have been observed. Testosterone-binding β -globulin showed an electrophoretic polymorphism in Caucasians and a possible deficiency allele. Tracycortin shows an electrophoretic variation in Caucasians and a possible deficiency allele. A protein binding a derivative of norepinephrine or epinephrine was identified as tyrosine- β -hydroxylase. A non-specific protein (Dialysate protein) was found in a different fraction. Protein Dialysate protein was found in a different fraction.

8 binding catalyzed by albumin and binding a deriv. of riboflavin was
tentatively identified as a fraction of albumin with mobility altered as
result of interaction with the ligand.

IT 68-13-3
RL ANST (Analytical study)
Proteins binding by detection of mannosidase in relation to

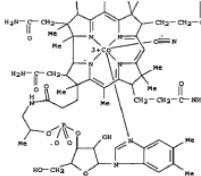
PROTEIN BOUNDING BY, DETECTION OF, 68-19-9 CASLUS

16 ANSWER 33 OF 33 CARLHS ©RIGHT 2003 AGS (Continued)

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PAGE 2-A



16. NUMBER 33 OF 33 MEDLINE
ACCESSION NUMBER: 72002087 MEDLINE
DOCUMENT NUMBER: 72002087 PubMed ID: 4999929
AUTHORS: Metzger B. J.
SOURCE: Measurement of glomerular filtration rate.
(1971) CRC CRITICAL REVIEWS IN CLINICAL LABORATORY SCIENCES,
Jan) 2 (1-4) Ref. 241
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
FILE SEGMENT: Permanency Journals
ENTRY MONTH: 197112
ENTRY DATE: 19711201 LPP02310
Last Updated on STM: 19990129
Entered Medline: 19711231